

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/746,375

DATE: 01/18/2001

TIME: 11:09:20

Input Set : A:\Pto.amc

Output Set: N:\CRF3\01182001\I746375.raw

```

1 <110> APPLICANT: Presnell, Scott R.
2     Kindsvogel, Wayne
4 <120> TITLE OF INVENTION: NOVEL CYTOKINE ZCYTO18
6 <130> FILE REFERENCE: 99-106
C--> 8 <140> CURRENT APPLICATION NUMBER: US/09/746,375
C--> 8 <141> CURRENT FILING DATE: 2000-12-22
8 <150> PRIOR APPLICATION NUMBER: US 60/172,105
9 <151> PRIOR FILING DATE: 1999-12-23
11 <150> PRIOR APPLICATION NUMBER: US 60/***,***
12 <151> PRIOR FILING DATE: 2000-12-01
14 <160> NUMBER OF SEQ ID NOS: 44
16 <170> SOFTWARE: FastSEQ for Windows Version 3.0
18 <210> SEQ ID NO: 1
19 <211> LENGTH: 1116
20 <212> TYPE: DNA
21 <213> ORGANISM: Homo sapiens
23 <220> FEATURE:
24 <221> NAME/KEY: CDS
25 <222> LOCATION: (21)...(557)
27 <400> SEQUENCE: 1
28   tcgagttaga attgtctgca atg gcc gcc ctg cag aaa tct gtg agc tct ttc      53
29                               Met Ala Ala Leu Gln Lys Ser Val Ser Ser Phe
30                               1           5           10
32   ctt atg ggg acc ctg gcc acc agc tgc ctc ctt ctc ttg gcc ctc ttg      101
33   Leu Met Gly Thr Leu Ala Thr Ser Cys Leu Leu Leu Leu Ala Leu Leu
34               15           20           25
36   gta cag gga gga gca gct gcg ccc atc agc tcc cac tgc agg ctt gac      149
37   Val Gln Gly Gly Ala Ala Ala Pro Ile Ser Ser His Cys Arg Leu Asp
38               30           35           40
41   aag tcc aac ttc cag cag ccc tat atc acc aac cgc acc ttc atg ctg      197
42   Lys Ser Asn Phe Gln Gln Pro Tyr Ile Thr Asn Arg Thr Phe Met Leu
43               45           50           55
45   gct aag gag gct agc ttg gct gat aac aac aca gac gtt cgt ctc att      245
46   Ala Lys Glu Ala Ser Leu Ala Asp Asn Asn Thr Asp Val Arg Leu Ile
47               60           65           70           75
49   ggg gag aaa ctg ttc cac gga gtc agt atg agt gag cgc tgc tat ctg      293
50   Gly Glu Lys Leu Phe His Gly Val Ser Met Ser Glu Arg Cys Tyr Leu
51               80           85           90
53   atg aag cag gtg ctg aac ttc acc ctt gaa gaa gtg ctg ttc cct caa      341
54   Met Lys Gln Val Leu Asn Phe Thr Leu Glu Glu Val Leu Phe Pro Gln
55               95           100          105
57   tct gat agg ttc cag cct tat atg cag gag gtg gtg ccc ttc ctg gcc      389
58   Ser Asp Arg Phe Gln Pro Tyr Met Gln Glu Val Val Pro Phe Leu Ala
59               110          115          120
61   agg ctc agc aac agg cta agc aca tgt cat att gaa ggt gat gac ctg      437
62   Arg Leu Ser Asn Arg Leu Ser Thr Cys His Ile Glu Gly Asp Asp Leu
63               125          130          135

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/746,375

DATE: 01/18/2001

TIME: 11:09:20

Input Set : A:\Pto.amc

Output Set: N:\CRF3\01182001\I746375.raw

```

65 cat atc cag agg aat gtg caa aag ctg aag gac aca gtg aaa aag ctt      485
66 His Ile Gln Arg Asn Val Gln Lys Leu Lys Asp Thr Val Lys Lys Leu
67 140                      145                      150                      155
69 gga gag agt gga gag atc aaa gca att gga gaa ctg gat ttg ctg ttt      533
70 Gly Glu Ser Gly Glu Ile Lys Ala Ile Gly Glu Leu Asp Leu Leu Phe
71                      160                      165                      170
73 atg tct ctg aga aat gcc tgc att tgaccagagc aaagctgaaa aatgaataac      587
74 Met Ser Leu Arg Asn Ala Cys Ile
75                      175
77 taaccccoctt tccctgctag aaataacaat tagatgcccc aaagcgattt tttttaacca      647
78 aaaggaagat gggaagccaa actccatcat gatgggtgga ttccaaatga acccctgcgt      707
79 tagttacaaa ggaaaccaat gccacttttg tttataagac cagaaggtag actttctaag      767
80 catagatatt tattgataac atttcattgt aactgggtgt ctatacacag aaaacaattt      827
81 attttttaaa taattgtctt tttccataaa aaagattact ttccattcct ttaggggaaa      887
82 aaacccttaa atagcttcat gtttccataa tcagtacttt atattttataa atgtatttat      947
83 tattattata agactgcatt ttatttatat cattttatta atatggattt atttatagaa      1007
84 acatcattcg atattgctac ttgagtgtaa ggctaataat gatatttatg acaataatta      1067
85 tagagctata acatgtttat ttgacctcaa taaacacttg gatataccta      1116
87 <210> SEQ ID NO: 2
88 <211> LENGTH: 179
89 <212> TYPE: PRT
90 <213> ORGANISM: Homo sapiens
92 <400> SEQUENCE: 2
93 Met Ala Ala Leu Gln Lys Ser Val Ser Ser Phe Leu Met Gly Thr Leu
94 1                      5                      10                      15
95 Ala Thr Ser Cys Leu Leu Leu Leu Ala Leu Leu Val Gln Gly Gly Ala
96                      20                      25                      30
97 Ala Ala Pro Ile Ser Ser His Cys Arg Leu Asp Lys Ser Asn Phe Gln
98                      35                      40                      45
99 Gln Pro Tyr Ile Thr Asn Arg Thr Phe Met Leu Ala Lys Glu Ala Ser
100                      50                      55                      60
101 Leu Ala Asp Asn Asn Thr Asp Val Arg Leu Ile Gly Glu Lys Leu Phe
102 65                      70                      75                      80
103 His Gly Val Ser Met Ser Glu Arg Cys Tyr Leu Met Lys Gln Val Leu
104                      85                      90                      95
105 Asn Phe Thr Leu Glu Glu Val Leu Phe Pro Gln Ser Asp Arg Phe Gln
106                      100                     105                     110
107 Pro Tyr Met Gln Glu Val Val Pro Phe Leu Ala Arg Leu Ser Asn Arg
108                      115                     120                     125
109 Leu Ser Thr Cys His Ile Glu Gly Asp Asp Leu His Ile Gln Arg Asn
110                      130                     135                     140
111 Val Gln Lys Leu Lys Asp Thr Val Lys Lys Leu Gly Glu Ser Gly Glu
112 145                     150                     155                     160
113 Ile Lys Ala Ile Gly Glu Leu Asp Leu Leu Phe Met Ser Leu Arg Asn
114                      165                     170                     175
115 Ala Cys Ile
117 <210> SEQ ID NO: 3
118 <211> LENGTH: 167
119 <212> TYPE: PRT

```

RAW SEQUENCE LISTING

DATE: 01/18/2001

PATENT APPLICATION: US/09/746,375

TIME: 11:09:20

Input Set : A:\Pto.amc

Output Set: N:\CRF3\01182001\I746375.raw

120 <213> ORGANISM: Homo sapiens

122 <400> SEQUENCE: 3

```

123 Met Gly Thr Leu Ala Thr Ser Cys Leu Leu Leu Leu Ala Leu Leu Val
124   1           5           10           15
125 Gln Gly Gly Ala Ala Ala Pro Ile Ser Ser His Cys Arg Leu Asp Lys
126           20           25           30
127 Ser Asn Phe Gln Gln Pro Tyr Ile Thr Asn Arg Thr Phe Met Leu Ala
128           35           40           45
129 Lys Glu Ala Ser Leu Ala Asp Asn Asn Thr Asp Val Arg Leu Ile Gly
130           50           55           60
131 Glu Lys Leu Phe His Gly Val Ser Met Ser Glu Arg Cys Tyr Leu Met
132           65           70           75           80
133 Lys Gln Val Leu Asn Phe Thr Leu Glu Glu Val Leu Phe Pro Gln Ser
134           85           90           95
135 Asp Arg Phe Gln Pro Tyr Met Gln Glu Val Val Pro Phe Leu Ala Arg
136           100          105          110
137 Leu Ser Asn Arg Leu Ser Thr Cys His Ile Glu Gly Asp Asp Leu His
138           115          120          125
139 Ile Gln Arg Asn Val Gln Lys Leu Lys Asp Thr Val Lys Lys Leu Gly
140           130          135          140
141 Glu Ser Gly Glu Ile Lys Ala Ile Gly Glu Leu Asp Leu Leu Phe Met
142          145          150          155          160
143 Ser Leu Arg Asn Ala Cys Ile
144           165

```

146 <210> SEQ ID NO: 4

147 <211> LENGTH: 501

148 <212> TYPE: DNA

149 <213> ORGANISM: Artificial Sequence

151 <220> FEATURE:

152 <223> OTHER INFORMATION: Degenerate polynucleotide of ZCYTO18

154 <221> NAME/KEY: misc_feature

155 <222> LOCATION: (1)...(501)

156 <223> OTHER INFORMATION: n = A,T,C or G

158 <400> SEQUENCE: 4

```

W--> 159 atgggnacny tngcnacnws ntgyytnytn ytnyngcny tnyngtnca rggnggngcn      60
W--> 160 gcngcncna thwsnwsnca ytgymgnytn gayaarwsna ayttycarca rccntayath      120
W--> 161 acnaaymgna cnttyatgyt ngcnaargar gcwnsnytn cngayaayaa yacngaygtn      180
W--> 162 mgnytnathg gngaraaryt nttycayggn gtnwsnatgw sngarmgntg ytayytnatg      240
W--> 163 aarcargtny tnaayttyac nytnngargar gtnytnnttyc cncarwsnga ymgnttycar      300
W--> 164 ccntayatgc argargtngt nccnttyytn gcnmgnytnw snaaymgnyt nwsnacntgy      360
W--> 165 cayathgarg gngaygayyt ncayathcar mgnaaygtnc araarytnaa rgayacngtn      420
W--> 166 aaraarytn gngarwsngg ngarathaar gcathggng arytngayyt nytnttyatg      480
W--> 167 wsnytnmgna aygcntgyat h                                          501

```

170 <210> SEQ ID NO: 5

171 <211> LENGTH: 24

172 <212> TYPE: DNA

173 <213> ORGANISM: Artificial Sequence

175 <220> FEATURE:

176 <223> OTHER INFORMATION: Oligonucleotide primer ZC25840

RAW SEQUENCE LISTING

DATE: 01/18/2001

PATENT APPLICATION: US/09/746,375

TIME: 11:09:20

Input Set : A:\Pto.amc

Output Set: N:\CRF3\01182001\I746375.raw

```

178 <400> SEQUENCE: 5
179 ctggatatgc aggtcatcac cttc
181 <210> SEQ ID NO: 6
182 <211> LENGTH: 24
183 <212> TYPE: DNA
184 <213> ORGANISM: Artificial Sequence
186 <220> FEATURE:
187 <223> OTHER INFORMATION: Oligonucleotide primer ZC25841
189 <400> SEQUENCE: 6
190 tcgagttaga attgtctgca atgg
192 <210> SEQ ID NO: 7
193 <211> LENGTH: 23
194 <212> TYPE: DNA
195 <213> ORGANISM: Artificial Sequence
197 <220> FEATURE:
198 <223> OTHER INFORMATION: Oligonucleotide primer ZC25838
200 <400> SEQUENCE: 7
201 aggttctcct tccccagtca cca
203 <210> SEQ ID NO: 8
204 <211> LENGTH: 23
205 <212> TYPE: DNA
206 <213> ORGANISM: Artificial Sequence
208 <220> FEATURE:
209 <223> OTHER INFORMATION: Oligonucleotide primer ZC25839
211 <400> SEQUENCE: 8
212 tagcctcctt agccagcatg aag
214 <210> SEQ ID NO: 9
215 <211> LENGTH: 40
216 <212> TYPE: DNA
217 <213> ORGANISM: Artificial Sequence
219 <220> FEATURE:
220 <223> OTHER INFORMATION: Oligonucleotide primer ZC13946
222 <400> SEQUENCE: 9
223 ccctgcagtg atcaacatgg ccaagttgac cagtgcggtt
225 <210> SEQ ID NO: 10
226 <211> LENGTH: 45
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial Sequence
230 <220> FEATURE:
231 <223> OTHER INFORMATION: Oligonucleotide primer ZC13945
233 <400> SEQUENCE: 10
234 gcccatggac tagtttcgaa aggtcgagtg tcagtctgctc tcctc
236 <210> SEQ ID NO: 11
237 <211> LENGTH: 34
238 <212> TYPE: DNA
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: Oligonucleotide primer ZC18698
244 <400> SEQUENCE: 11

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/746,375

DATE: 01/18/2001

TIME: 11:09:20

Input Set : A:\Pto.amc

Output Set: N:\CRF3\01182001\I746375.raw

```

245 tttttttctc gagacttttt tttttttttt tttt          34
247 <210> SEQ ID NO: 12
248 <211> LENGTH: 18
249 <212> TYPE: DNA
250 <213> ORGANISM: Oligonucleotide primer Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: Oligonucleotide primer ZC26414
255 <400> SEQUENCE: 12
256 agctgcctcc ttctcttg          18
258 <210> SEQ ID NO: 13
259 <211> LENGTH: 18
260 <212> TYPE: DNA
261 <213> ORGANISM: Artificial Sequence
263 <220> FEATURE:
264 <223> OTHER INFORMATION: Oligonucleotide primer ZC26415
266 <400> SEQUENCE: 13
267 tagggctgct ggaagttg          18
269 <210> SEQ ID NO: 14
270 <211> LENGTH: 6
271 <212> TYPE: PRT
272 <213> ORGANISM: Artificial Sequence
274 <220> FEATURE:
275 <223> OTHER INFORMATION: Glu-Glu (CEE) peptide Tag amino acid sequence
277 <400> SEQUENCE: 14
278 Glu Tyr Met Pro Met Glu
279 1          5
281 <210> SEQ ID NO: 15
282 <211> LENGTH: 8
283 <212> TYPE: PRT
284 <213> ORGANISM: Artificial Sequence
286 <220> FEATURE:
287 <223> OTHER INFORMATION: C-terminal FLAG peptide tag
289 <400> SEQUENCE: 15
290 Asp Tyr Lys Asp Asp Asp Asp Lys
291 1          5
293 <210> SEQ ID NO: 16
294 <211> LENGTH: 36
295 <212> TYPE: DNA
296 <213> ORGANISM: Artificial Sequence
298 <220> FEATURE:
299 <223> OTHER INFORMATION: Oligonucleotide primer ZC28590
301 <400> SEQUENCE: 16
302 ttgggtacct ctgcaatggc cgccctgcag aaatct          36
304 <210> SEQ ID NO: 17
305 <211> LENGTH: 33
306 <212> TYPE: DNA
307 <213> ORGANISM: Artificial Sequence
309 <220> FEATURE:
310 <223> OTHER INFORMATION: Oligonucleotide primer ZC28580

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/746,375

DATE: 01/18/2001

TIME: 11:09:21

Input Set : A:\Pto.amc

Output Set: N:\CRF3\01182001\I746375.raw

L:8 M:270 C: Current Application Number differs, Replaced Current Application No

L:8 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:159 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4

L:160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4

L:161 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4

L:162 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4

L:163 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4

L:164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4

L:165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4

L:166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4

L:167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4